

CLAIMS

What is claimed is:

1. A method for controlling loss of drilling fluid in a borehole comprising;
mixing coconut coir with the drilling fluid to form a drilling fluid mixture.
2. The method according to claim 1 wherein the drilling fluid mixture comprises of at least one type of lost circulation materials other than the coconut coir.
3. The method according to claim 2, wherein the at least one type of lost circulation material comprises a fibrous material.
4. The method according to claim 3, wherein the fibrous material comprises at least one of group consisting of as cotton fibers, cottonseed hulls, rice hulls, shredded automobile tires, wood fibers, sawdust, and paper pulp.
5. The method according to claim 2, wherein the at least one type of lost circulation material comprises a flaky material.

Randall B. Bateman
10 W. 100 South, Suite 425
P.O. Box 1319
Salt Lake City, UT 84110
(801) 539-1900

6. The method according to claim 5, wherein the flaky material comprises at least one of the group consisting of mica, shredded cellophane, wood chips, and plastic laminate.

7. The method according to claim 2, wherein the at least one type of lost circulation material comprises granular material.

8. The method according to claim 7, wherein the granular material comprises at least one of the group consisting of ground nutshells, perlite, ground carbonate, sand and pea gravel.

9. The method according to claim 2, wherein the at least one type of lost circulation material comprises a slurry.

10. The method according to claim 9, wherein the slurry comprises at least one of the group consisting of hydraulic cement, oil-bentonite-mud mixes, and high filter loss drilling fluids.

11. The method according to claim 1 wherein the method comprises adding pelletized coconut coir to the drilling fluid.

12. The method according to claim 1, wherein the method comprises using pellets of coconut coir sufficiently soft to be reduced into coconut coir particles before introduction into the borehole.

13. The method according to claim 1, wherein the method comprises using coconut coir pellets which have been compacted to minimize swelling of the coconut coir prior to release into the borehole.

14. The method according to claim 1, wherein the coconut coir is between 1 and 28 percent of the drilling fluid mixture by volume.

15. The method according to claim 2, wherein the coconut coir is between 1.4 and 14 percent of the drilling fluid mixture.

16. The method according to claim 1, wherein the borehole comprises an oil or gas well borehole.

17. A mixture for lubricating a drilling implement comprising:

a drilling fluid; and

coconut coir mixed with the drilling fluid.

18. The mixture of claim 17, wherein the mixture further comprises at least one type of lost circulation material other than coconut coir.

19. The mixture of claim 18, wherein the mixture comprises at least one of the group consisting of fibrous materials, flaky materials, granular materials, and slurries.

20. The mixture of claim 17, wherein the coconut coir comprises between about 0.5 percent 28 percent of the mixture by weight.

21. The mixture of claim 20, wherein the coconut coir comprises between about 1.4 and 14 percent by weight of the mixture.

22. A lost circulation material for use in preventing loss of drilling fluid in a borehole comprising coconut coir.

23. The lost circulation material according to claim 22, wherein the coconut coir comprises short fibers, flakes, granular pieces, and powder of coconut husk.

24. The lost circulation material according to claim 22,
wherein the coconut coir is formed into pellets.

25. The lost circulation material according to claim 24,
wherein the pellets are configured to be reduced to particles of
coconut coir as they are being injected into the borehole.

26. The lost circulation material according to claim 24,
wherein the pellets compacted sufficiently that they are not
substantially reduced into particles of coconut coir before
injection into the borehole.

27. The lost circulation material according to claim 26,
wherein the pellets are compacted so that they slowly absorb
fluid and swell.